

Notice of Allowability	Application No.	Applicant(s)	
	10/654,780	OPFERMANN ET AL.	
	Examiner	Art Unit	
	Frederick F. Rosenberger	2884	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 13 September 2005.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>7/18/05</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

1. Applicant's response, filed 13 September 2005, has been received and entered. Accordingly, changes have been made to the abstract and claims 1, 2-6, and 11. Claim 13 has been cancelled. Claims 1-12 remain pending in this application.

Response to Amendment

2. The declaration submitted on 1 July 2005 is acceptable.
3. Applicant's amendments to the specification have successfully overcome the objections to the specification, as detailed in paragraphs 3, 4, and 5 of the Office action mailed 6 April 2005.
4. Applicant's amendments to the claims have successfully overcome the objections to claims 1-12 and the rejection of claims 11 and 13 under 35 U.S.C. 112, as detailed in paragraphs 6, 8, and 10 of the Office action mailed 6 April 2005.
5. Applicant's arguments (see page 9, last paragraph through the top of page 10 of applicant's response filed 1 July 2005) have successfully traversed the objection of claims 2-6 regarding the definition of variables within the equations of the claims. As such, the objection to claims 2-6 has been withdrawn.

Art Unit: 2884

6. The declaration under 37 CFR 1.132 filed 1 July 2005 is sufficient to overcome the rejection of claims 1-12 based upon the reference to Blumm et al. applied under 35 U.S.C. 103. As applicant has noted, the inventive entity in the present application is the same as the authors of the Blumm et al. reference and because of the publication date would fail to qualify as prior art under 35 U.S.C. 102.

Allowable Subject Matter

7. Claims 1-12 are allowed.

8. The following is an examiner's statement of reasons for allowance:

Claim 1 describes a device for detecting a thermal conductivity of a sample by application of an optical pulse, wherein an analyzer unit is designed to derive the thermal conductivity based on the signal from an infrared sensor corrected by performing a convolution with the signal of a second sensor by approximating a laser pulse in at least two sections by means of an exponential function. While it is known in prior art systems to correct the signal for thermal conductivity measurement based on an approximation of the pulse signal, the prior art only teaches simplified approximations in a single section, such as triangular functions, rectangular functions, or trapezoidal functions (see, for example, Vozar et al. and Xue et al.). Further, those instances where a pulse has been approximated in two sections have used a linear approximation for the first section followed by an exponential function for the second section (see, for example, Dusza). The prior art fails to teach or reasonably suggest

Art Unit: 2884

approximating the laser pulse in at least two sections by means of an exponential function. As such, applicant's disclosure provides a novel and nonobvious improvement over the prior art. Accordingly, the claim 1 would be allowable. Claims 2-12 would be allowable by virtue of their dependency on claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick F. Rosenberger whose telephone number is 571-272-6107. The examiner can normally be reached on Monday-Friday 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2884

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frederick F. Rosenberger
Patent Examiner
GAU 2884

A handwritten signature in black ink, appearing to read 'DAVID PORTA', with a long horizontal flourish extending to the right.

DAVID PORTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800